

EXHIBIT 2

DECLARATION OF HARRI HURSTI

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct.

1. My name is Harri Hursti. I am over the age of 21 and competent to give this testimony. The facts stated in this declaration are based on my personal knowledge, unless stated otherwise.
2. My background and qualifications in voting system cybersecurity are set forth in my prior declaration, at Document 480-1, pages 37 *et seq.*
3. Logic and Accuracy (“L&A”) Testing is a collection of pre-election procedures conducted at the county level to ensure that the voting software has been properly set up and ballots to be used in an upcoming election are properly configured. The L&A is primarily ballot specific attribute testing and is not intended to address sophisticated security, trustworthiness and other software properties’ aspects of the voting system.
4. The settings instruct the software to properly display the ballot, voter instructions, collect votes, and tabulate results accurately. Therefore, the purpose of L&A testing is to test the election configuration, ballot style and other election specific settings. It is not designed or nearly robust enough for testing the software functionality, security and error free performance.

5. The software testing should be part of the election system certification testing at the federal and state level. The fact that Georgia's Dominion software (5.5-A(GA)) programming error was discovered in L&A testing undercuts the credibility of the sufficiency of certification testing that was undertaken to ensure that software will work in accordance with the specifications. Dominion Democracy Suite certification documents clearly state that the system can handle contests with over 20 candidates.

6. Based on the description given by witnesses for the State in the conference held today, the proposed process to address the software flaw discovered is not to implement the small safer modification by a patching process. Instead the proposed process seems to be replacement of the software in its entirety by overwriting the existing programming with new programming. This approach introduces highly elevated security and operational risks.

7. It has been previously described that software verification has been done in Georgia's process by reviewing self-calculated hash values on the BMDs. As no additional measures were described today, I will restate that self-calculated hash values can never be used to determine and verify software integrity against malicious activity. The method can only be trusted to reveal changes and data corruption caused by non-malicious actions. It is an uncontested fact that malicious software and malicious modification can cover up its presence by dishonestly

presenting expected hash value to provide false evidence that the software is genuine.

8. After new software installation, but before L&A testing, thorough functional testing should be conducted on each BMD unit to verify that the new software installation was successful and working as expected. According to State witnesses, no such testing is planned for this newly written software change. Such a minimum testing process before L&A is not an instant process and requires time to complete.


9. Software changes must always be tested both for functionality and security. From the security point of view, de minimis changes do not exist. Some of the most devastating software vulnerabilities have been matter of a single character being wrong or missing. The history of software security has countless examples of unintended consequences resulted from small changes hastily deployed without proper testing and analysis.

Conclusions

10. In my opinion the State's plan for addressing the software flaw is extraordinarily risk laden, particularly given that the new software has not even had EAC review, which is itself a low bar, but a necessary first threshold. The risk of a failed election escalates when such last minute software changes are made to an already high-risk unauditable system such as a BMD system.

11. The only reliable method of safeguarding the election from the high risk of failure is to issue hand marked paper ballots which provide the only truly resilient voting system with the ability to create a defensible election.

Executed this 28 day of September 2020.

A handwritten signature in black ink, appearing to be 'H. Hursti', is written over a horizontal line.

Harri Hursti